Compact 4-socket server for 64-bit, mid-tier software applications

IBM @server® xSeries 366

Highlights

- ***Delivers breakthrough, four-socket performance with 64-bit memory addressability through IBM @server® X3 Architecture, the third-generation of IBM Enterprise X-Architecture™***
- ***Designed to simultaneously accommodate high-performance, dual-core 64-bit Intel® Xeon™ Processors MP and run 32- and 64-bit applications, providing headroom and investment protection***
- ***Delivers lower downtime with three levels of memory protection and optional advanced systems management technology***
- ***Leverages years of IBM server deployment expertise and the enterprise-proven reliability of the Intel-architecture design***

The IBM @server xSeries® 366 delivers outstanding performance, extremely low latency and high availability and manageability along with advanced, integrated technologies that help protect your IT investment. The x366 is the first xSeries system designed with IBM @server X3 Architecture, the third generation of mainframe-inspired IBM Enterprise X-Architecture Technology, and 64-bit Intel Xeon Processors MP. Driving mission-critical applications including Enterprise Resource Planning, collaboration or custom-developed, Java™ technology-based applications like IBM WebSphere® software, the x366 excels at performing transaction-intensive, traditional back-office functions.

Improve performance and reduce latency

The x366 provides more computing power in a smaller form factor (3U) than many competitive models giving organizations powerful commercial application-hosting capabilities in a

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compact design. It delivers up to 16 times the memory addressing and three times the CPU bus bandwidth compared to previous server designs. Using the IBM XA-64e™ chipset, this X3 Architecture system benefits from reduced processor front-side bus traffic via integrated snoop filtering. The XA-64e speeds communications between the processors, main memory and I/O, helping the x366 power commercial IT applications.

Leverage high availability and increased security

Delivering availability without compromising performance, the x366 is an industry-leading choice for mission-critical environments. Combining high-availability technologies that have become the hallmark of Enterprise X-Architecture servers with newly integrated hardware-based security features, the system helps enable high uptime and protection of your enterprise applications. Simple integration of industry-leading software tools and true, hardware-based remote systems management, monitoring and alerting capabilities combine to deliver further enhancements in availability. These advancements include:

- *The field-proven, dual front-side bus architecture of the 64-bit Intel® Xeon™ Processor MP combined with the third-generation Enterprise X-Architecture chipset*
- *DDR2-based IBM Active Memory™ technology, which encourages continuous operation and increased uptime using advancements such as IBM Chipkill™ memory, IBM Memory ProteXion™, Memory Mirroring and hot-swap/hot-add capability*
- *Classic IBM mainframe-inspired features, including light path diagnostics, IBM Predictive Failure Analysis®, IBM Active™ PCI-X and full hot-swap redundancy in all major subsystems*

X3 Architecture: Innovation that matters

Delivering an industry-leading, 64-bit framework for mid-tier application development, the x366 is built on the power of X3 Architecture, the third generation of mainframe-inspired IBM Enterprise X-Architecture technology. X3 Architecture drives the x366 to deliver outstanding performance, availability and manageability required for the next-generation of industry-standard servers. Four-socket performance and 64-bit memory addressability provide an optimized platform for the application-serving tier. At the crossroads of a major industry transition to mainstream 64-bit applications, X3 Architecture delivers a formidable combination of 64-bit performance, availability and investment protection not yet available in an industry-standard x86 server. With its extensive chipset development experience and high performance and availability breakthroughs, IBM is uniquely positioned to offer a robust and powerful server, offering innovation that delivers real business and IT results.

Take advantage of integrated management for greater value

Advanced, integrated features in the x366 also help streamline and simplify systems management while helping reduce its associated costs. Industry-leading systems manageability features include:

- *IPMI-compliant basic hardware monitoring and alerting with an optional upgrade to the advanced Remote Supervisor Adapter (RSA) II Slimline, helping to protect server availability through system monitoring and delivering true remote management capabilities saving administrators time and providing them greater flexibility*
- *A Trusted Platform Module (TPM), helping to simplify and improve security management with integrated, hardware-based security functionality that authenticates users and protects against viruses and other system threats*
- *IBM Director software, which offers extensive hardware management within a convenient user interface, support for multiple operating systems and a consistent framework that can be extended with plug-ins for more advanced management all giving administrators greater ease of use, faster application deployment and adaptability for remote monitoring with customizable alerts*

Get more for your money

Many of the integrated features and innovations offered in the x366 also help deliver investment protection by making organizations ready for the next evolution in enterprise applications and serving technologies—the migration to 64-bit applications on industry-standard x86 hardware. Thermally and mechanically designed for dual-core compatibility, the x366 features IBM Calibrated Vectored Cooling™ which helps keep internal components cool for optimum performance and greater longevity. With simultaneous 32- and 64-bit software compatibility provided by Intel® Extended Memory 64 Technology (Intel® EM64T), the x366 also helps protect the value of your software investment with a framework that supports new 64-bit enterprise applications along with 32-bit legacy applications and system tools as well. And the x366 features Active PCI-X 2.0 with up to 266 MHz bandwidth per slot, the new standard for high-performance server I/O—preserving compatibility with the existing installed-base of PCI and PCI-X 1.0 adapters.

Select configurations of the x366 are part of the IBM Express Portfolio™, designed, developed and priced to meet the specific needs of midsized businesses. The IBM Express Portfolio of solutions is easy to acquire, install and manage. Express models and configurations vary by country.

DEMAND™ EXPRESS PORTFOLIO™
BUILT FOR MID-SIZED BUSINESS.

xSeries 366 at a glance

Form factor	Rack/3U
Processor	64-bit Intel® Xeon™ Processor MP at up to 3.66 GHz/supports Intel® Extended Memory 64 Technology
Number of processors (min/max)	1/4
Cache (max)	1MB L2 per processor plus Integrated XceL4v™ Dynamic Server Cache
Memory[1] (std/max)	2GB/64GB PC2-3200 DDR2 SDRAM
Disk bays (total/hot-swap)	6/6 2.5" Serial Attached SCSI (SAS)
Maximum internal storage[1,2]	440.4GB SAS (supports 36.4GB and 73.4GB hard disk drives)
Network	Integrated dual 10/100/1000 Ethernet
Power supply (std/max)	1300W 1/2 hot-swap
Hot-swap components	Power supplies, fans, memory, hard disk drives and PCI-X adapters
RAID support	RAID-5 optional
Systems management	Alert on LAN™, Automatic Server Restart, IBM Director, IBM ServerGuide™, Remote Supervisor Adapter II Slimline optional, light path diagnostics (independently powered), Predictive Failure Analysis® on hard disk drives, processors, VRMs, fans and memory, Wake on LAN®
Operating systems supported	Microsoft® Windows® Server™ 2003 (Standard and Enterprise editions 32-bit and x64), Red Hat® Linux®, SUSE LINUX, Microsoft Windows 2000 (Server and Advanced Server), VMware™ ESX Server™
Limited warranty[3]	3-year onsite limited warranty

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[1] Maximum internal hard disk and memory capacities may require the replacement of any standard hard drives and/or memory and the population of all hard disk bays and memory slots with the largest currently supported drives available. When referring to variable speed CD-ROMs, CD-Rs, CD-RWs and DVDs, actual playback speed will vary and is often less than the maximum possible.

[2] When referring to storage capacity, GB = 1,000,000,000 bytes. Accessible capacity is less.

[3] Visit **ibm.com**/pc/safecomputing **periodically for the latest information on safe and effective computing.** Warranty information: For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, N.C. 27709, Attn: Dept. JDJA/B203. IBM makes no representation or warranty regarding third-party products or services including those designated as ServerProven® or ClusterProven®. Telephone support may be subject to additional charges. For onsite labor, IBM will attempt to diagnose and resolve the problem remotely before sending a technician.

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